Comparisons of Job Characteristics

Focus Occupation: Environmental Science and Protection Technicians, Including Health

(19-4091)

Associated Occupation: Conservation Scientists (19-1031)

Compare Knowledge Compare Skills Compare Abilities Compare Detailed Work Activities Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 7

Focus Occupation: Environmental Science and Protection Technicians, Including Health (19-4091) Associated Occupation: Conservation Scientists (19-1031)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Biology	3.7	16.2	11.4	<<	Extensive education and/or training may be required
Geography	3.9	14.3	9.7	<<	Extensive education and/or training may be required
Law and Government	5.9	11.4	9.8	<	Expanded education and/or training may be required
History and Archeology	2.6	9.0	2.7	<<	Extensive education and/or training may be required
Food Production	2.1	5.5	1.7	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 91

Focus Occupation: Environmental Science and Protection Technicians, Including Health (19-4091) Associated Occupation: Conservation Scientists (19-1031)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations		Focus Occupation's Rating	Evaluation of Focus Occupation
Science	4.5	9.3	10.3	Skill level is likely sufficient
Systems Analysis	6.5	9.3	8.6	Current skill level may be sufficient
Operations Analysis	5.0	9.0	7.9	A higher skill level may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

95

Focus Occupation: Environmental Science and Protection Technicians, Including Health (19-4091) Associated Occupation: Conservation Scientists (19-1031)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation		
Oral Expression	12.4	14.7	13.2	<	Some improvement in abilities may be required	
Oral Comprehension	12.5	14.0	13.5	0	Current ability level may be sufficient	
Written Comprehension	11.0	13.7	13.9	0	Current ability level may be sufficient	
Problem Sensitivity	11.1	13.0	11.9	0	Current ability level may be sufficient	
Speech Clarity	10.2	12.7	10.0	<	Some improvement in abilities may be required	
Deductive Reasoning	10.6	12.6	11.8	0	Current ability level may be sufficient	
Inductive Reasoning	10.2	12.2	11.4	0	Current ability level may be sufficient	
Written Expression	9.8	12.1	12.9	0	Current ability level may be sufficient	
Speech Recognition	9.9	12.0	10.0	<	Some improvement in abilities may be required	
Far Vision	7.8	10.5	8.3	<	Some improvement in abilities may be required	
Originality	7.6	10.1	8.2	<	Some improvement in abilities may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 73

Focus Occupation: Environmental Science and Protection Technicians, Including Health (19-4091) Associated Occupation: Conservation Scientists (19-1031)

Work Activities	Exclusivity of Activity
Adhere to safety procedures	12
Advise clients or customers	19
Advise governmental or industrial personnel	28
Analyze biological research, test, or analysis data	70
Analyze ecosystem data	69
Analyze scientific research data or investigative findings	27
Collect scientific or technical data	30
Collect statistical data	47
Communicate technical information	4
Conduct field research or investigative studies	52
Confer with scientists	54
Determine specifications	67
Develop or maintain databases	30
Develop plans for programs or projects	31

Develop policies, procedures, methods, or standards	21
Develop tables depicting data	33
Direct and coordinate activities of workers or staff	3
Direct implementation of new procedures, policies, or programs	60
Ensure compliance with government regulations	76
Explain complex mathematical information	30
Explain rules, policies or regulations	48
Maintain records, reports, or files	5
Make decisions	24
Prepare reports	8
Prepare technical reports or related documentation	22
Recommend action to ensure compliance	73
Record test results, test procedures, or inspection data	48
Use computers to enter, access or retrieve data	3
Use government regulations	44
Use interpersonal communication techniques	10
Use interviewing procedures	23
Use knowledge of environmental laws and regulations	76
Use knowledge of investigation techniques	16
Use mathematical or statistical methods to identify or analyze problems	30
Use pollution control techniques	62
Use quantitative research methods	35
Use relational database software	26
Use scientific research methodology	21
Use spreadsheet software	18
Use word processing or desktop publishing software	17

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 86

Focus Occupation: Environmental Science and Protection Technicians, Including Health (19-4091) Associated Occupation: Conservation Scientists (19-1031)

Tools and Technologies		Exclusivity
Cameras	\Box [2
Computers	\Box [1
Content authoring and editing software	\Box [1
Data management and query software	\Box [1
Industry specific software	\Box [1
Information exchange software	\Box [1
Network applications software	\Box [1
Sampling equipment	$\Box \llbracket$	12
Soil measuring equipment	\Box [20

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.